

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP2004/002654

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03D7/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H03D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 606 738 A (ONODERA KIYOMITSU ET AL) 25 February 1997 (1997-02-25) column 15, line 3 - line 18; figures 7A-7F, 15	1-5
X	US 3 694 756 A (CARLSON DAVID JOHN) 26 September 1972 (1972-09-26) column 4, line 33 - line 46; figure 2	1-5
X	US 6 400 777 B1 (STRAKOVSKY LEONID) 4 June 2002 (2002-06-04) figure 3	1,8
A	EP 1 119 102 A (SANYO ELECTRIC CO) 25 July 2001 (2001-07-25) column 12, line 42 - column 13, line 4; figures 1,12 column 17, line 52 - column 19, line 30 -/-	1,9,10

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

24 June 2004

Date of mailing of the international search report

05/07/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 060 298 A (KUMAR MAHESH ET AL) 22 October 1991 (1991-10-22) figure 6 -----	1, 14

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/002654

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5606738	A	25-02-1997	JP	7235836 A	05-09-1995
			JP	7273557 A	20-10-1995
US 3694756	A	26-09-1972	AT	339958 B	25-11-1977
			AT	404071 A	15-03-1977
			BE	766978 A4	01-10-1971
			CA	997001 A1	14-09-1976
			DE	2122658 A1	25-11-1971
			ES	390856 A2	01-07-1973
			FR	2100642 A6	24-03-1972
			GB	1348789 A	20-03-1974
			IT	976362 B	20-08-1974
			JP	51035090 B	30-09-1976
			MY	20776 A	31-12-1976
			NL	7106446 A	15-11-1971
			ZA	7103007 A	26-01-1972
US 6400777	B1	04-06-2002	US	2002071495 A1	13-06-2002
EP 1119102	A	25-07-2001	JP	2001203542 A	27-07-2001
			EP	1119102 A2	25-07-2001
			US	2001008383 A1	19-07-2001
US 5060298	A	22-10-1991	NONE		